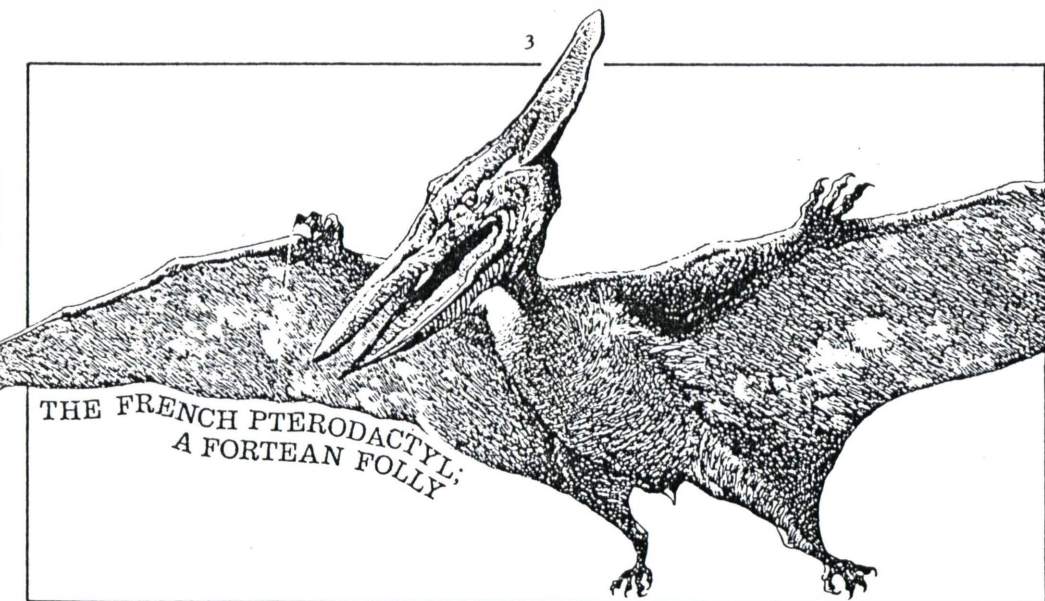




MICHAEL GOSS

WHEN Professor Challenger wanted to prove to zoological sceptics that pterodactyls weren't extinct after all, he merely arranged an expedition to an unknown plateau in the Matto Grosso and caught one. The sight of the gargoyle-faced nightmare filling London's Queens Hall with the "dry, leathery flapping of its ten-foot wings" and with a "putrid and insidious odour" as it circled overhead left Challenger's enemies in no doubt: the pterodactyl tribe most certainly was not extinct!

BUT of course this was only a fictional scene in a novel: the climax to the evocatively-titled *The Lost World* by Sir Arthur Conan Doyle. And as Challenger's pterodactyl quitted the Queens Hall via an inadvertently open window and was last seen over the Atlantic apparently homing towards South America, we've two good reasons for not seeing it in any museum. But what possible explanation can there be for the amazing absence of the French pterodactyl?

The French Pterodactyl - let us use that term rather than the more general 'pterosaur' that is applied today - was, in the words of the Illustrated London News for 9 February 1856, a "discovery of the greatest scientific importance". This value judgement did not prevent the report from

being relegated to an obscure corner of the weekly where it could have been easily missed. Those who did not miss it learned the following.

Workmen engaged in cutting a railway tunnel through the Liassic rocks at Culmont, Haute Marne were breaking up an enormous block of stone when "from a cavity in it they suddenly saw emerge a living being of monstrous form.

"This creature, which belongs to the class of animals hitherto considered to be extinct, has a very long neck, and a mouth filled with sharp teeth. It stands on four long legs, which are united together by two membranes, doubtless intended to support the animal in the air, and are armed with four claws terminated by long and crooked talons. Its general form resembles that of a bat, differing only in its size, which is that of a large goose. Its membranous wings, when spread out, measure from tip to tip three metres, twenty two centimetres. Its colour is livid black; its skin is naked, thick and oily..."

Few modern readers would have trouble tying this French 'discovery' in with the prehistoric creature that Conan Doyle (just over half a century later) depicted turning a zoological meeting into a near riot. In case some Illustrated London News readers were

not so well up in recent zoological researches - and especially those concerning the fossilized oddities of remote antiquity - the reporter made things a good deal easier for them:

"On reaching the light this monster gave some signs of life, by shaking its wings, but soon after expired, uttering a hoarse cry. This strange creature, to which may be given the name of a living fossil, has been brought to Gray, where a naturalist well versed in the study of palaeontology, immediately recognised it as belonging to the genus *pterodactylus anas*."

With a pertinent reminder that the sedimentary strata holding this unique relic dated it at "more than one million years", the article ends. The epoch making specimen had become the property of Science, leaving its discoverers with only the mute testimony of that cavity in the stone block it had but lately filled with airtight precisions. Today we have even less evidence of the famous French Pterodactyl; for all the use Science appears to have made of it, the thing may as well not have existed. Which is only to be expected, because the French Pterodactyl did not exist.

More miraculous than the preservation of the Culmout anomaly is the way in which the story surrounding it has survived the eroding powers of time. From a secluded end-of-page slot in a Victorian weekly it has become a Fortean classic, a favourite of the 'Amazing Unexplained Mysteries' school. Writers hard pressed for material are prone to resurrect the Pterodactyl as mercilessly as the tunnel-builders in the original *Illustrated London News*.

In some ways the reluctance shown by both writers and readers to discard the story is wholly comprehensible. We want to believe in the kind of Lost World called forth in Conal Doyle's novel and in the films based on that powerful motif. We want to retain the merest sliver of hope that somewhere the prehistoric monsters of our childhood reading may be holding out in spite of the scientists' disbelief. Any evidence is avidly seized upon, be it a reported sighting of a saurian in West Africa or the lesson of the coelacanth. If a fish that was already old when the first dinosaurs were born could survive and remain unknown as a living form until as late as 1938 - can't we entertain hopes for the still more exciting creatures we've grown up with since our infant reading days?

The skies of this Lost World of printed page and cinema screen would be strangely empty without the snaggle-toothed, bat-

caped animals we know as pterodactyls. They are among the best- or most widely-known members of the prehistoric menagerie and among the first to be discovered, scientifically named and studied. Even as early as 1843 a by no means credulous naturalist like Edward Newman, editor of *The Zoologist*, could ponder on the mysteries of these animals which he rather defensively liked to think of as "marsupial bats". Modern researchers would hardly blink at propositions which Newman admitted were not only controversial for his time, but unlikely to sway zoologists from the opinions of palaeontological heavyweights like Cuvier and Buckland. He correctly guessed that 'pterodactyles' were a large and diversified group encompassing insect-eaters, fish-eaters and meat-eaters. His theory that they may have been clothed in hair has apparently been borne out in one case and appears likely to apply to many more, if not to all; he also seems to have been moving towards the position held by many today that the pterosaurs were warm-blooded animals. But how many would go along with his gently-dropped bombshell:

"I merely hint as a matter of surmise... that the race may yet probably exist; that representatives of the fossil pterodactyles may yet be found amongst the bats that abound within the tropics. Species or even genera become extinct, but it rarely happens that a vast group like the pterodactyles is wholly lost, and left without a representative".

If this article had not fixed its sights on one celebrated report of a pterosaurian survivor a good deal closer to home than the tropics, some fascinating material that goes part-way to justifying Newman's outrageous idea could be analysed. The native traditions from various parts of Africa might be examined; the 'Pteranodon' sightings half buried inside a spate of 'Big Bird' reports from Texas in early 1976 would be spotlighted. Not least interesting amongst these was the circumstantial account of the three San Antonio elementary-school teachers interviewed by Fate's Jerome Clark and Loren Coleman [1]. It see doubly strange that such sightings of what had formerly been called the largest Pterosaur known to science should come so close in time and space to the announcement of the fragmentary remains of a new and even larger specimen discovered at Big Bend National Park in the same state. (With an overall estimated wingspan of up to 39 feet, *Quetzalcoatlus* represented a genuine upstaging of Pteranodon's 26 feet. Both make the French Pterodactyl of 1856 seem insignificant at a miserly ten-foot-plus from tip to tip!)

But it may be more profitable to concentrate on pterosaurs and the Victorians. In the intellectual climate of their period - in the very language of that period - is the key to the fact that the French Pterodactyl could only have been a playful hoax.

The Victorians had a profound respect for Science with a capital S: not purely for its practical applications, but in the abstract too. It thus meant the creation of an atmosphere of 'seriousness' in which the foundations of many 20th Century sciences were laid, it also bred a suspicion that academicism was taking too much of the wonder out of life. The often pedantic and dogmatic tone of many scientists - an intol-

UNDERWORLD - from page 2

The Servants of Light, PO Box 215, St. Helier, Jersey, CI. Based in Quabbalistic magic (the best kind, in my uninformed opinion - it has a charm and sense to it, lacking in most other traditions), it's grottyly duplicated, but has nice articles on Arthurian Themes in Science Fiction, and 'Sharing My Life with Dryads'. I also like the Editor's description of Live-Aid as "an act of magic in its fullest sense".

Formoas - A Periodical of the Occult Arts describes itself as an 'occultzine', and is well produced with quality line illustrations with an overall commitment to A.O.Spare. An emphasis on practical - mostly Quabbalistic - magic, and analysis makes this a good journal for the newcomer. The edition I have is vol.1, no.4, and it costs £5 p.a. (4 iss.) from Sothis Publishing, C/O Technique Studio, Unit A10, Hi-Tech House, 10 Blackfriars St., Norwich.

At a rough guess I think I have 35-40 more publications to send for, most of which I have not seen before, and I'll let you know of my progress early in the new year. I reckon some interesting ideas and beliefs should come to light, and some interesting people and experiences, too: all grist to the Magonian Mill, to the pursuit of the fringes of human experience. Of course, if you publish a journal that falls in our field of interest, I'd be grateful to receive it, or at least details of how I can pay you for one. If you know of something I shouldn't miss, please tell me about it.

Finally, please remember the point I used to make in Common Ground. The most rewarding aspect of editing a small magazine is to have people buy and read it, and the best most editors can hope for financially is not to have to spend too much of their own money subsidising their own publications. Make an editor happy - send for a magazine or two!

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erance towards anecdotal evidence from unqualified observers, for example - was also offensive to outsiders. One way of evening the score was to perpetrate hoaxes which took in (or burlesqued the manner of) these self-appointed experts.

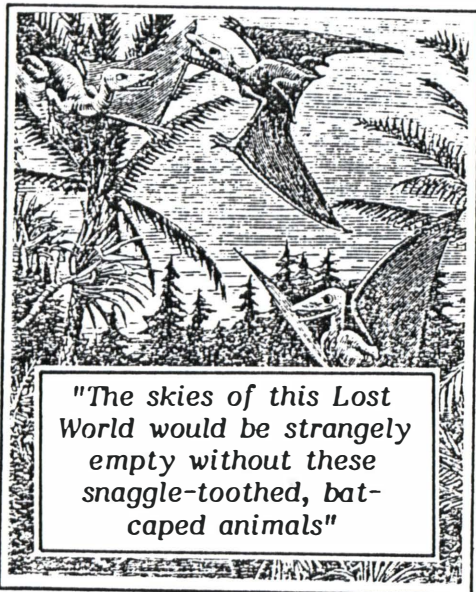
No area of science at this juncture was more fluid than zoology. By 1856 there were still discoveries to be made, exciting new animals amongst them. Palaeontology was still a developing and controversial field; Owen had only coined the term 'dinosaur' as recently as 1841 and the major percentage of large, sensationally-bizarre prehistoric animals with which we populate our own visions of primeval landscapes would remain unknown for another 30 years. Above all, these sciences had not yet reached a point where the observations of intelligent but untrained amateurs were totally excluded.

So on the one hand there was the optimistic hope that new forms were to be discovered and on the other a growing rigidity of scientific attitude which stated that the opinions of the professional scientist could not be contested. In this climate any incident which restored the sense of wonder by contradicting the dogmatism of the experts assumed huge importance. It is no coincidence that some of the most ambitious hoaxes which found their way into the early-Victorian publications featured some aspect of zoology.

As the opinions of Edward Newman indicate, the pterosaurs were a legitimate object of speculation. For all practical purposes they were scarcely known in 1856 and the ones which attract most attention today - Pteranodon, for instance - were still buried in the rocks. The first, discovered in c.1784 and properly described by Cuvier in 1801, came from the fine lithographic limestone of Solnhofen in Bavaria which was to become famous as the cenary of these 'flying reptiles'. Dimorphodon, a cumbersome looking pterosaur whose appearance seems to have influenced Conan-Doyle's impressions of what pterodactyls looked like, was found at Lyme Regis by England's famous fossil-hunter Mary Anning in 1828. However the public did not see reconstructions of it until almost 50 years later. Popular awareness of what a prehistoric animal was supposed to have looked like is of crucial significance, as we'll consider in a moment.

To the annoyance of most professional zoologists and palaeontologists, the fossilized evidence of the prehistoric world led encouragement to certain 'irrational' beliefs that they could well have done without. Most patent of these was the hypothesis that perhaps the great saurians were not a memento of bygone days but the living, breathing answer to certain conundrums that men

of science had signally failed to explain. The Great Sea Serpent was less an object of derision if you presented it as a plesiosaur that had survived for millions of years in the deep and unexplored ocean. And if reptilian monstrosities were being unearthed in the world's quarries, was it not just possible that the tales of living toads found immured in blocks of stone or coal - a phenomenon reliably reported by numerous observers, it seemed - were far less unlikely than zoologists would admit-



"The skies of this Lost World would be strangely empty without these snaggle-toothed, bat-caped animals"

The infuriated scientists shouted "No!" to both propositions, yet the propositions would not go away. As late as 1915, E. Ray Lankester - the man whose popular lectures and book on *Extinct Animals* (1906) had done so much to inform laymen on what the prehistoric menagerie looked like in the flesh - was still combatting the idea that toads-in-stone were marvellously preserved survivors entombed when their 'prisons' were laid down millenia ago. Lankester was the "gifted friend" whose "excellent monograph... the standard work" was acknowledged by Professor Challenger (and hence by Conan Doyle) in *The Lost World*, but he was no friend of the 'prehistoric survivor' theory. Having forcefully pointed out that these imprisoned amphibia had not even evolved when the sediments and coal measures said to contain them were laid down, he styled the concept as worthless as:

"...the similar but perhaps bolder statement indulged in from time to time by an inventive transatlantic Press... that

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some workmen blasting a rock in quarries at Barnumsville were astonished by the escape from a cavity within the solid rock of a large flying lizard or pterodactyle which immediately spread its wings and flew out of sight." [2]

Several Fortean writers have shared Lankester's belief that a connection exists between toads-in-stone stories and the French (and possibly other?) pterodactyl(s); but not his conclusion on the invalidity of those accounts. If we choose to disagree with him, however, we have to concede it sheerly amazing that the unique specimen identified so positively by the "naturalist well-versed in the study of palaeontology" is not the star exhibit in some world-famous collection. As far as the *Illustrated London News* report goes, it did not spread its wings and fly out of sight, as per Lankester, but it should have been available for study and acclaim. Only it most clearly wasn't. Inconceivable thought - could someone have ... mislaid it?

"People don't stumble upon enormous discoveries and then lose their evidence", Tarp Henry cautions Malone, when he mentions that Prof. Challenger lost a freshly-deceased pterosaur carcase in a boat accident, "Leave that to the novelists." But supposing we could accept that evidence - including French Pterodactyls - can on occasions go missing. The story contains enough errors to destroy its own credibility even so.

Taking the *Illustrated London News* account as a starting point, a modern-day palaeontologist would frown with bewilderment at the description of the French Pterodactyl. As a journalistic attempt it might pass muster, but as a scientific guide to the animal it is hopeless - and the few details emerging from it are very ambiguous. The size ("which is that of a large goose") and wingspan ("ten feet plus") make it sound suspiciously larger and hence more dramatic than any specimen completely known at the time, but they are not beyond the realms of belief [3]. "Naked, thick and oily skin", however is a lot less likely; it would have provided no insulation against heat-loss in flight. Back in 1856, though, 'pterodactyles' were always depicted in reptilian nudity because no-one had yet found evidence to support the widely held modern view that some kind of hair or down covered their bodies.

These complaints aren't simply academic trivialities. The French Pterodactyl does not sound right for our times because the animal it describes doesn't match the picture we have of pterosaurs. But it is perfect for the picture of pterosaurian morphology

that prevailed at the time the account was written. The typical pterosaur of the 1850's was a repulsive combination of bird, bat, lizard and medieval dragon - a gargoyle come to life. The loathsomeness of this unappetizing blend was stressed at every opportunity till it attained an almost meta-physical dimension, with added disgust arising from the indecent nakedness of the monster. This is the pterosaur described by the Illustrated London News's man in France: not a real impression of an actual living creature, but a mechanical attempt to reproduce a standard (and to us anachronistic) portrait conforming with readers' expectations. But the errors caused by the attempt to translate into words the popular imagery of the day do not stand in isolation when we examine certain literary/artistic standards of the society that produced the report.

As fitted one of the 'golden ages' of popular literature, early Victorians had keen ears for language and (perhaps even more so!) an eye for double meanings to words. Puns - many of them too dreadful, forced or elaborate for our taste - proliferated; in certain circumstances they were held to be the height of witticism. With the same grand catholicism that could be found in most areas of 1850's life and culture, readers loved not just the puns that only a classically-educated person could be expected to construe, but likewise ones based on slang and street-talk.

For a researcher in the 1980's this kind of playing upon words can be an etymological maze. The sense of a joke may depend on some piece of slang which has been defunct for over a century and therefore almost as unintelligible as Martian. Classical puns may be less formidable to a student of Latin or Greek, but even there no defence exists against the 'macaronic' pun where the double meaning is at one or more stages removed, perhaps from one language to another, via a third.

The French Pterodactyl account contains clues illustrative of all kinds of Victorian punology. There is a straightforward slang pun and a Latin pun leading into the convoluted two-language 'macaronic' variety. In fact, the main clue depends heavily on a subtle movement from Latin to French and thence to contemporary slang - not an easy process to anticipate as you read a purportedly-authentic newspaper report!

In his *Strange Creatures from Time and Space* (1975) John Keel has outlined the ingenious suggestion that the motive behind the Culmout may have contained a flavour of nationalistic pride: a hoax to put France's old rivals across the Rhine

into the shade. Quite likely recent finds at Sölnhofen and the burgeoning fame of that South German site may have given some Frenchmen grounds for jealousy. Nor is it impossible that some Gallic hoaxer decided to go a giant step beyond Germany's story remains of pterosaurs by offering the savants something far better - the tantalizing hint of a living one. Even so, he or she had a perfect understanding of the kind of linguistic wizardry required to 'sell' the story to the British newspapers. Despite the French news agency credited at the end of the ILN report, this could have been a quite 'British' affair, with clues inbuilt to entertain the cognoscenti who were so vulnerable to the challenge of these punning games.

Few of the books which have lifted the story verbatim from the ILN bother with the original title to the piece: "Very Like a Whale". In choosing this pithy piece the magazine wasn't quoting Hamlet gratuitously, but letting everybody know how they felt about the veracity of the story. Then as now, British readers knew that a 'whale' of a story was a 'whopper', something too big to be swallowed (i.e. believed). And the complete phrase was, by the 1850's, applied liberally to anything considered to be far less than probable. That was how the ILN regarded the French pterodactyl; no doubt readers were expected to take it in the same spirit.

But even without that title, the text contained a sophisticated philological multipun that must have given its inventor more than one chuckle of satisfaction.

The palaeontologically-aware naturalist of Gray, we are told, lost no time in identifying the unwholesome-looking, newly-expired corpse as that of *Pterodactylus anas*. Every specific name attached to an animal - here 'anas' - has a meaning which can be translated from the original Greek or Latin. This meaning can be descriptive, or may commemorate the name of a place or person, perhaps the animal's discoverer. *Pterodactylus anas* is not one of the species listed in Henry Govier Seeley's authoritative *Dragons of the Air* (1901) which concentrates on the more important specimens found during the previous century; nor could the Natural History Museum locate it as a superceded term. Yet 'anas' must have some meaning.

Indeed it has, though when we take down any comprehensive Latin dictionary the results don't seem to promising. 'Anas' simply stands for 'duck' - the bird not the verb; on the face of things a description presumably based on the size of the ptero-

same attitude and Galileo was again told that he was quite free to discuss his ideas, provided he made it quite clear that they were mere hypothesis, and did not purport to give a true picture of the universe.

Again, he failed to take the advice, and finally went too far, so far as the Pope and his advisers were concerned, in his book *Dialogue Concerning the Two Principle Systems of the World*. In this, by the use of irony, he insinuated that the Church's attitude was based on foolishness and ignorance. It was typical of him that he obeyed the summons to Rome to be tried by the Inquisition, instead of taking up an offer of asylum in Venice, presumably still determined to convert the Church to his way of thinking.

Perhaps his greatest error was to see that one of his major arguments worked both ways. He argued that the authors of the Bible accommodated their writings to everyday speech and common beliefs

in order to put their religious message in a manner understandable to all, yet he failed to realise that the Church had to do the same to express its teachings in terms that could be understood by ordinary people, and not just by philosophers and intellectuals. The Popes and others in the Church who bore heavy responsibilities for the spiritual welfare of millions were obviously aware of this. They realised that any sudden change in the Church's teaching would cause great harm by throwing the faithful into confusion. They were also no doubt aware that it would be very rash to make such drastic changes to accommodate a scientific theory which might yet be shown to be false and be superseded by yet another theory.

Had Galileo realised this, and taken the Church's advice, then perhaps the new astronomy could have gradually and painlessly taken hold of popular awareness and the cosmology of Aristotle would have died a natural death. \$\$\$

PTERODACTYL - from page 7

dactyl, as there's little to choose between a duck-sized bird and the ILN's assertion that the specimen was the size of a large goose.

But there is more to it than that. Besides being Latin for duck, 'anas' was the root for several other words for that bird in European languages, notably French - le canard. Here is where the punster comes into his own, for in English popular speech, 'canard' has a highly amusing meaning: it means 'false news' or 'hoax'.

The French have been talking about "halfselling a goose" - a venture so self-evidently impossible as to stand for fooling somebody - since the early seventeenth century. The derived use of the more compact 'canard' had certainly crossed the Channel to Britain before 1850. At the time of the ILN story it was becoming an increasingly common expression in print. The ILN's 'whale' of a tale could just as easily have been called a duck of a yarn or an exercise in old-fashioned duck salesmanship, French-style.

Quite conceivably the punster whose choice of 'species-name' was a direct comment on the bogus quality of their own story never expected the thing to achieve very much. It might indeed delude a few gullible ones and perhaps generate enough curiosity for those stuffy, patronising experts to find themselves on the end of many time-wasting questions about living pterodactyls. The modestly-cultivated reader with his classical

education would hover for a few minutes, but soon would be wearing a broad grin as he saw the pterodactyl for the 'canard' it really was. The inventor wouldn't have dared imagine this little fabrication would last for over a century and continue to retain a place in the Amazing Mysteries literature of the 1980's. For if the joke is on anyone, it has to be on us. What the Victorians were offered as a jest, we have taken as solid, mirth-free fact. We have swallowed the whale, and half-bought the duck...

One reason for this state of affairs is that we don't share our so-literate-forefathers' love of puns. Nor is Latin seen any longer as an inevitable acquisition of schooldays, which makes us even less likely to see the point when a writer tells us in one breath that a living pterodactyl is on offer, and in the next that it belongs to a certain species named the Pterodactyl Hoax! We are locked still more firmly to straightforward assessments - a thing being either Fact or Fiction - by reading the account in Fortean or Ripleyesque books which encourage us to believe it's Unbelievable but True.

Having considered all that, there is something endearing about the French Pterodactyl that makes us want to believe in it. The most incredible aspect of the story is that it not only survives but shows no sign of vanishing into dinosauric extinction.